

ABSTRACT OF THE INVENTION

A baseband controller system includes a master to a multi-slave asynchronous transmit FIFO structure that enables the traffic to all slaves to be independent of each other in a manner that reduces the shortcomings of traditional FIFO structures. The inventive FIFO structure includes a plurality of pointer blocks wherein each of the FIFO pointer blocks comprises a plurality of one-byte pointers that point to command blocks. The command blocks, in turn, define an address that point to a starting address of a data block. Accordingly, because the FIFO pointer blocks only include an address for a pointer to a command block instead of the actual data that is to be transmitted, the size of the FIFO structure is dramatically reduced. Thus, the transmission order for the data blocks is determined by ordering the pointers instead of by ordering the data itself.